

TAPPED IN

Bringing you news, updates and information from Watercare



The Patel family, from Mt Albert, are reducing their water use. Pictured are Shanta and Prashant Patel (inset).



For more ways to reduce your water use – and your water bill – use our free, personalised water advice and audit service. Phone us on (09) 442 2222 or email info@water.co.nz to find out more.

Ensuring a wonderful, ‘water-ful’ future

Water is essential to life. Every day, we use it for drinking, bathing, cleaning, cooking and gardening. It is vital for many industries, a key ingredient for agriculture and an essential element in many of our leisure activities. It is also a finite and very precious resource.

We offer a free water advice and audit service, which provides a personalised report showing how a household can best save water. The Patel family, from Mt Albert, recently took advantage of this and say they learned some very simple ways to reduce their water use.

“The audit was really detailed – they checked every appliance that uses water as well as all the fittings,” Prashant Patel says. “The changes they suggested aren’t difficult for us to do, such as taking shorter showers, using the economy setting when doing laundry and

only running the dishwasher when it’s full. They also installed flow restrictors on the showers to make them more efficient and left some shower timers, which have been a big hit with everyone!”

“The Patels were already very waterwise in their garden,” says Olivia Tukuogo, who works for the Watercare-funded EcoMatters water advice line, “but we left them a trigger to use with their garden hose to ensure water is used only when and where it is needed.”

Prashant says he encouraged other family members to have home water audits done as well, and they have all been very pleased with the service.

Watercare is committed to helping you use water wisely, but we’re also doing our bit to

ensure we use water efficiently and contribute to a more sustainable Auckland.

By investing in more advanced metering technology we can more easily identify and reduce water leakage from our networks. We recycle and reuse treated wastewater at our wastewater treatment plants. We also carry out water efficiency audits at each of our water and wastewater treatment plants to make sure we reduce any unnecessary water use.

Reducing water use benefits us all. It means taking less water from the environment and generating less wastewater for treatment. It also means we can delay the need to develop new water sources and treatment capacities. Together, we can create a more sustainable Auckland.

Working towards a more sustainable Auckland

We're committed to managing Auckland's water resources in a sustainable way. Our approach combines a number of different initiatives, from reducing energy use and using recycled treated wastewater throughout our operations, through to helping you, our customers, to use water efficiently – below are a few examples.

By reducing water use – and demand – we're working towards a more sustainable Auckland.

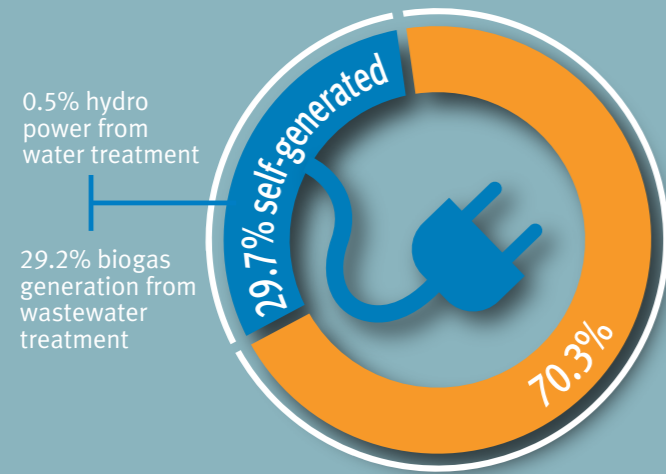
Wastewater

Reusing water

We use recycled treated wastewater at our Mangere and Rosedale plants for some on-site processes. By reusing this water, we saved the same volume of water that 156,000 Aucklanders would use in a year.



Screening is the first line of wastewater treatment. Here, screens at the Mangere plant intercept solid debris from raw wastewater. We use treated wastewater to clean these screens.



Energy neutral by 2025

Between July 2016 and June 2017, we generated almost 30 per cent of our own energy needs. We're aiming to run our Mangere and Rosedale wastewater treatment plants entirely on self-generated electricity by 2025.

Benefiting from biosolids

Biosolids are the solid organic materials that are produced during the wastewater treatment process. Because they are nutrient-rich, and treatment has removed any dangerous microorganisms and odours, a number of countries are using them as fertiliser in agricultural industries.

We use biosolids from the Mangere Wastewater Treatment Plant as part of our Puketutu Island restoration. And we're also investigating other uses for biosolids so we can reduce the amount disposed of in landfills.



Trialling their suitability for turf farming, floriculture and pasture rejuvenation



Studying the possibility of using them as a soil conditioner in the forestry industry



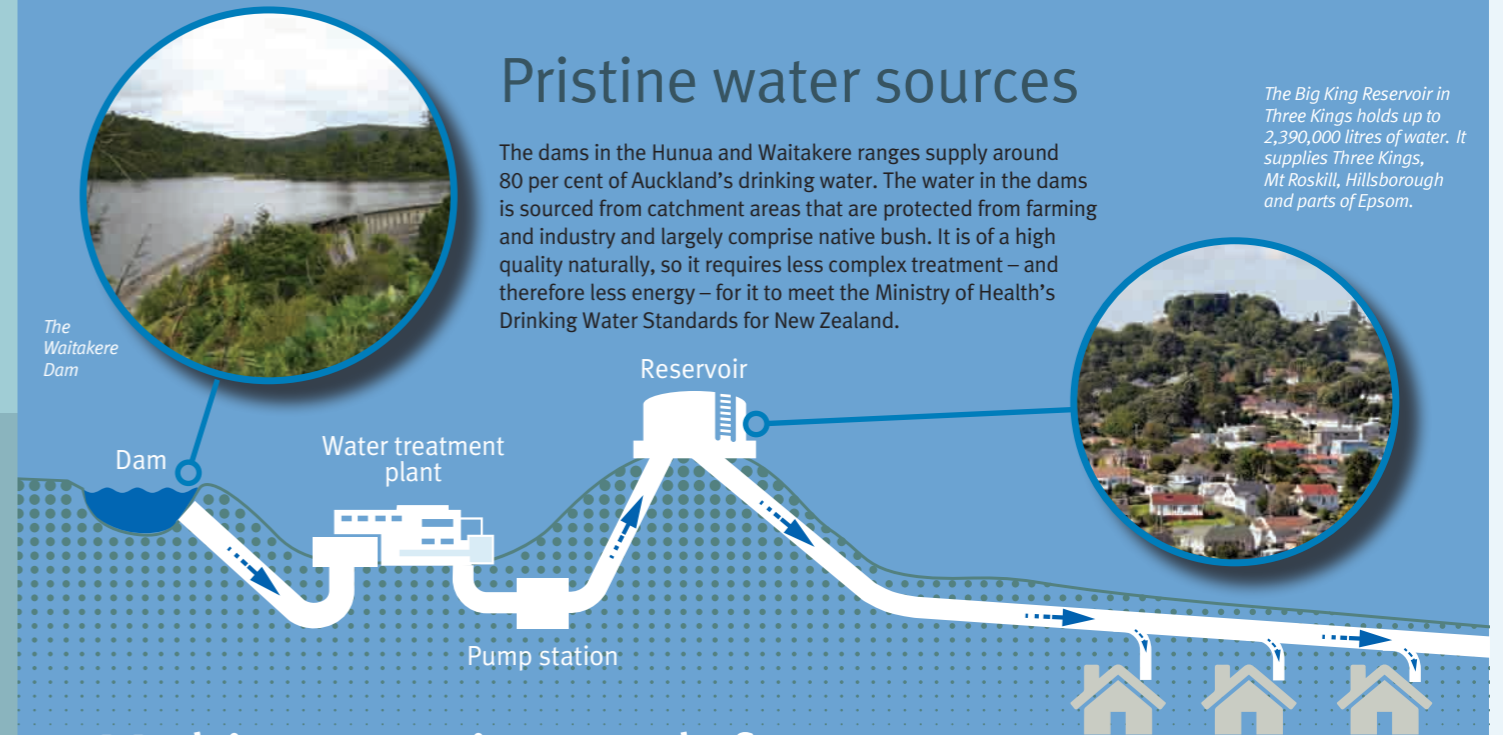
Working with industry to set up national environmental standards for their use on land

Water

Pristine water sources

The dams in the Hunua and Waitakere ranges supply around 80 per cent of Auckland's drinking water. The water in the dams is sourced from catchment areas that are protected from farming and industry and largely comprise native bush. It is of a high quality naturally, so it requires less complex treatment – and therefore less energy – for it to meet the Ministry of Health's Drinking Water Standards for New Zealand.

The Big King Reservoir in Three Kings holds up to 2,390,000 litres of water. It supplies Three Kings, Mt Roskill, Hillsborough and parts of Epsom.



Making gravity work for us

There are 9,064 kilometres of pipes in our water network. If we had to pump water through every single one, it would take a great deal of energy. Instead, we inherited a network that uses Auckland's naturally hilly landscape so gravity does as much of the work as possible.

The main water storage dams are located high in the Hunua and Waitakere ranges. Gravity enables water to flow down to treatment plants with no other energy required. Treated drinking water is kept in reservoirs, which are also built in high places, such as Big King Reserve in Three Kings, as well as Mt Victoria and Mt Eden. From

these, water can flow down, again using gravity, through the water supply network to homes and businesses.

Pump stations are used strategically at low points in the network so that water can be lifted to a higher point and continue its journey under gravity until it reaches a home, business or another pump station.

The wastewater network also uses a combination of gravity-fed pipes and pump stations to transport wastewater from homes and businesses to treatment plants.

Looking after our freshwater friends

We work hard to minimise the impact of our activities and, where possible, to enhance the environment.

One way we reduce the effects our dams have on the surrounding freshwater ecologies is our native fisheries trap-and-haul programme. The dams create barriers to migrating fish and eels, so we transfer them around the dams to help them continue their migration journey.

Our dams have different consenting requirements depending on the unique populations of certain native fish within them. For example, mature eels need to complete their life cycle by migrating to waters as far away as Tonga to breed; so, every year we trap the eels in the Hunua and Waitakere dams and release them downstream to enable them to reach the sea.



Be waterwise in the garden this spring

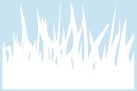
An easy way to reduce unnecessary water use is in the garden – it just takes a little planning.



If you are planning and planting flower beds this spring, group plants with similar watering needs together in one area to make watering more efficient. This will also ensure they all receive the correct amount of water.



Remember to plant vegetables well before it gets too warm, so they can establish a deep root system to access moisture deep down in the soil. Tomatoes and squash are especially quick at growing such roots.



If you're laying a new lawn or re-seeding bare patches, look for a drought-resistant lawn seed mix such as turf perennial ryegrass or fescues.

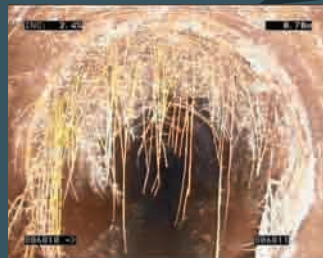
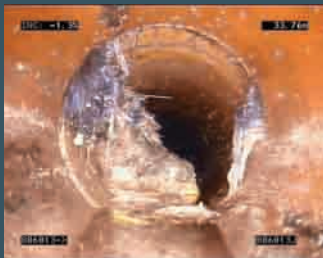


Reuse water in your garden! You can use soapy water from the house or dirty water from your fish tank over your plants – but remember that some plants cannot deal with water softeners and harsh detergents, and make sure to avoid the vegetable patch.



A reminder about tree roots

Before you plant a tree on your property, make sure the type you have chosen is appropriate for where you want to plant it. Your local nursery can help with this or consult a gardening guide. It's important to find out how far the tree's roots will travel – they usually extend about one-and-a-half times the distance of the adult plant's branches and up to 1.5 metres deep. Don't plant large, fast-growing trees with vigorous root systems near wastewater pipes. If you need to plant vegetation over or near a wastewater line, choose shrubs, grasses or small trees with less extensive root systems.

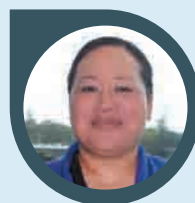


If I want to plant some trees on my property, how can I find out where my water and wastewater pipes are?

Tree roots can damage underground pipes so it's a very good idea to find out where the private water and wastewater pipes are on your property and plant trees as far away from them as possible. You can request this information from Auckland Council – fill out the online form at www.aucklandcouncil.govt.nz or phone 09 301 0101.

If there's something you've been wondering about in regard to our water or wastewater services, ask Nisi by emailing asknisi@water.co.nz.

Ask
Nisi



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Tapped In is your newsletter. If you would like to talk to us about any stories from this edition or your ideas for future issues, we'd love to hear from you. To get in touch, please phone our communications team on (09) 442 2222 or email info@water.co.nz. You can learn more about what we do at www.watercare.co.nz.